DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-022447 Address: 333 Burma Road **Date Inspected:** 22-Mar-2011

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Lv Li Qing No Yes N/A **Rod Oven in Use:** Yes **Inspected CWI report:** No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

Bridge No: 34-0006 **Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr. Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

BAY # 14

This QA Inspector randomly observed the following work in progress.

OBG 14EAST

FLUX CORED ARC WELDING PROCESS.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066236 performing the Flux Cored Arc Welding process on weld 010 located at PCMK SEG3019B. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066439 performing the Flux Cored Arc Welding process on weld 10 located at PCMK SEG3019C. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

WELDING INSPECTION REPORT

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This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067079 performing the Flux Cored Arc Welding process on weld 240 located at PCMK SEG3019E-2. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2132-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066733 performing the Flux Cored Arc Welding process on weld 098 located at PCMK SEG3019Z. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2231-ESAB.

WELD REPAIR

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066439 performing the Flux Cored Arc Welding process on weld 147 located at PCMK SEG3019E-2. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-FCAW-1G-ESAB-Repair.

SHIELDED METAL ARC WELDING PROCESS.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067571 performing the Shielded Metal Arc Welding process on weld 039 located at PCMK SEG3019AW. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2114-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 068764 performing the Shielded Metal Arc Welding process on weld 124 located at PCMK SEG3019X. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2114-Fcm-1.

During the random visual inspection of the AP3031 in OBG 14 east this QA Inspector observed the cope hole on AP3031 at the intersection of the AP3011 and SP3121B was unacceptable. The radius of the cope hole had shown 30mm as per shop drawing. The dimension cope hole measured 30mm X 90mm, regarding this issue this QA Inspector informed to ZPMC QC (Wang xu), ABF QA and QA lead (CT) as per ZPMC QC they will make required document and performed buttering to achieve actual size of the cope hole. See attached photo for additional information.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

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Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar,Shrikant	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer